

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (currently amended) A method comprising:

 forming a dielectric layer comprising a matrix material with a plurality of pores and
 porogen material within the pores; ~~and~~

 removing at least some of the porogen material from at least some of the plurality of
 pores; and

 wherein the porogen material comprises a material selected from a group consisting
 of polyethylene terephthalate, polyamide-6,6, syndiotactic polystyrene,
 polycaprolactone, polypropylene oxide, polyphenylene sulfide,
 polyamideimide, polyphthalamide, polymethylstyrene, polyethretherketone,
 polyether sulfone, polyoxymethylene, polybutylene terephthalate, and
 polystyrene.
2. (original) The method of claim 1 wherein removing at least some of the porogen
material comprises thermally decomposing at least some of the porogen material.
3. (original) The method of claim 2 further comprising depositing a thin film at a
deposition temperature.
4. (original) The method of claim 3 wherein the porogen material has a thermal
decomposition temperature higher than the deposition temperature.
5. (original) The method of claim 4 wherein the deposition temperature is about 300
degrees Celsius or lower.
6. (original) The method of claim 2 wherein the porogen material has a thermal
decomposition temperature lower than a thermal decomposition temperature of the matrix
material.

7. (original) The method of claim 6 wherein the porogen material has a thermal decomposition temperature higher than 300 degrees Celsius.

8. – 15. (canceled)

16. (currently amended) A method comprising:

forming a dielectric layer comprising a matrix material with a plurality of pores and porogen material within the pores;

forming a trench in the dielectric layer;

filling the trench with a conductive material, the filling being performed at a filling temperature; ~~and~~

removing at least some of the porogen material from at least some of the plurality of pores; and

wherein the porogen material comprises a material selected from a group consisting of polyethylene terephthalate, polyamide-6,6, syndiotactic polystyrene, polycaprolactone, polypropylene oxide, polyphenylene sulfide, polyamideimide, polyphthalamide, polymethylstyrene, polyethretherketone, polyether sulfone, polyoxymethylene, polybutylene terephthalate, and polystyrene.

17. (original) The method of claim 16 wherein the porogen material has a thermal decomposition temperature higher than the filling temperature and lower than a thermal decomposition temperature of the matrix material.

18. (canceled)

19. (currently amended) The method of claim 17 ~~[[18]]~~ wherein the matrix material comprises at least one of cross-linked polyphenylene, polyaryl ether, polystyrene, crosslinked

polyarylene, polymethylmethacrylate, aromatic polycarbonate, aromatic polyimide, methyl silsesquioxane, and hydrogen silsesquioxane.

20. (new) The method of claim 1 wherein the porogen material comprises polyethylene terephthalate.

21. (new) The method of claim 1 wherein the porogen material comprises polymethylstyrene.

22. (new) The method of claim 1 wherein the porogen material comprises polycaprolactone.

23. (new) The method of claim 1 wherein the porogen material comprises polypropylene oxide.

24. (new) The method of claim 1 wherein the porogen material comprises polybutylene terephthalate.

25. (new) The method of claim 1 wherein the porogen material comprises polyphenylene sulfide.